Preliminary Geologic Map available from:
http://www.conservation.ca.gov/cgs/rghm/rgm/preliminary_geologic_maps.htm

CALIFORNIA GEOLOGICAL SURVEY
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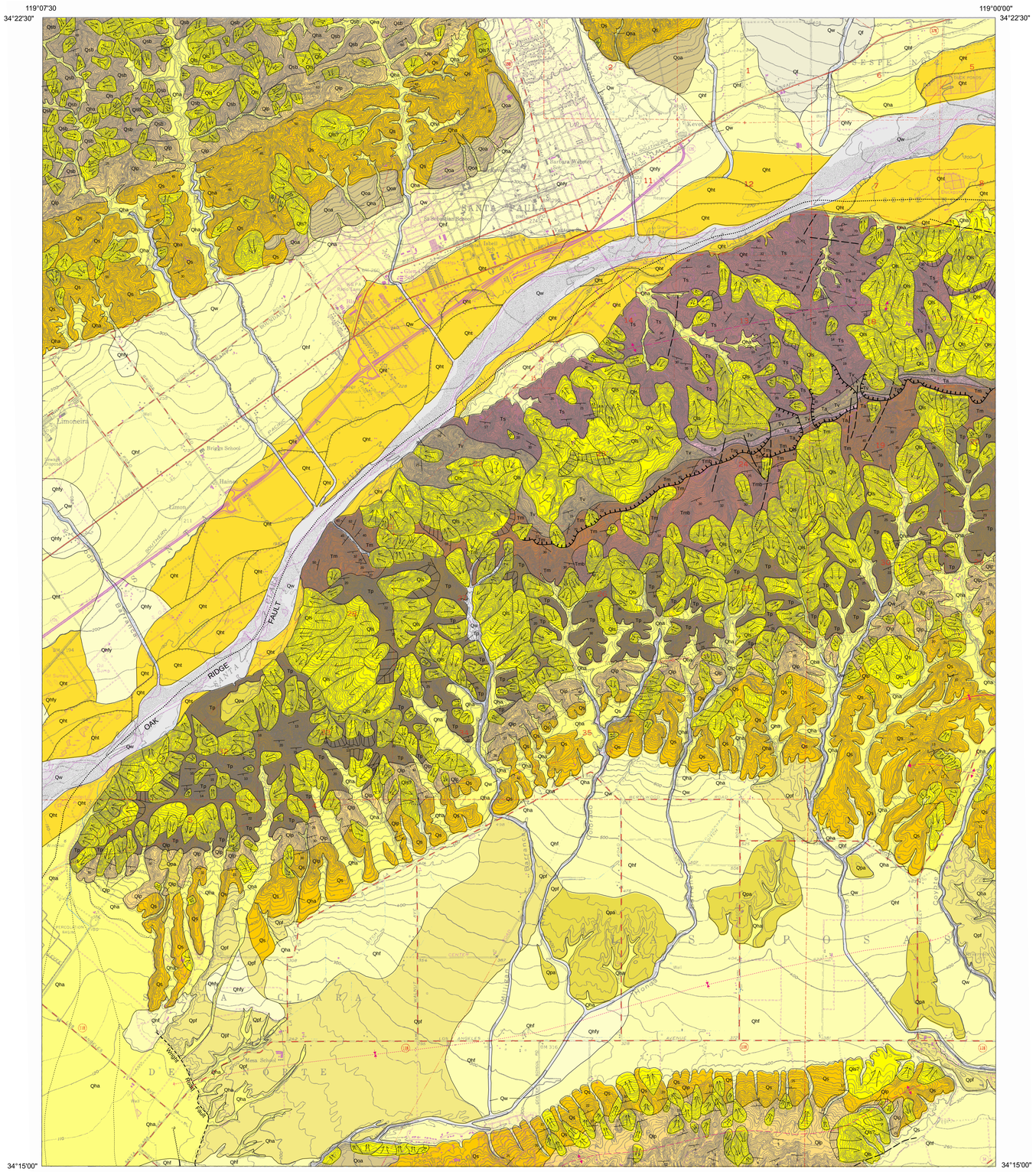
DEPARTMENT OF CONSERVATION - DARRYL YOUNG, DIRECTOR

Prepared in cooperation with the U.S. Geological Survey,
Southern California Areal Mapping Project



Topographic base from
the U.S. Geological Survey
UTM Projection, zone 11,
North American Datum 1927

UTM GRID AND 1987 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

0 .5 1 2 Miles

0 .5 1 2 Kilometers

0 1 2 3 Thousand Feet

Contour Interval 20 Feet
Dotted lines represent half-interval contours

This geologic map was funded in part by the
USGS National Cooperative Geologic Mapping
Program, Statemap Award no. 03HQAG0085

GEOLOGIC MAP OF THE SANTA PAULA 7.5' QUADRANGLE VENTURA COUNTY, CALIFORNIA: A DIGITAL DATABASE

VERSION 1.0

By
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2004

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EXPLANATION OF MAP UNITS

Qw — Wash deposits within major river channels (Holocene, historic) - Composed of unconsolidated silt, sand and gravel.

Qhfy — Alluvial fan deposits (latest Holocene) - Latest Holocene age is indicated by historical inundation or the presence of youthful braid bars and distributary channels, often deposits emanate from a point partway down the alluvial fan slope. Composed of moderately to poorly sorted and bedded gravel, sand, silt, and clay.

Qha — Alluvial deposits (Holocene) - Deposited as overbank material associated with unit Qw, recognized by scour and incised channeling features. Composed of unconsolidated, poorly sorted, clayey sand with some gravel. May include terrace deposits (Qht).

Qht — Stream terrace deposits (Holocene) - Deposited in point bar and overbank settings associated with the Santa Clara River. Composed of unconsolidated, poorly sorted, clayey sand and sandy clay with gravel.

Qhf — Alluvial fan deposits (Holocene) - Includes active fan deposits, deposited by streams emanating from mountain canyons to the north onto the alluvial valley floor. Deposits originate as debris flows, hyperconcentrated mudflows or braided stream flows. Composed of moderately to poorly sorted and moderately to poorly bedded sandy clay with some silt and gravel.

Qf — Alluvial fan deposits (late Pleistocene to Holocene) - Deposited on gently sloping, relatively undissected alluvial surfaces where deposits might be of either late Pleistocene or Holocene age, composed of moderately to poorly sorted sand, gravel, silt , and clay.

Qpf — Undivided fan deposits (Pleistocene) - Consists of consolidated clay sand, gravel, cobble and some boulder size material.

Qpa — Undivided alluvial deposits (Pleistocene) - Consists of consolidated silt, sand, clay, and gravel.

Qoa — Alluvial deposits (early to middle Pleistocene) - Moderately to deeply dissected undifferentiated alluvial deposits where topography often consists of gently rolling hills with little or none of the original planar surface preserved, or tilted surfaces along active range fronts. Composed of moderately to poorly sorted and bedded gravel, sand, silt, and clay.

Qls — Landslide deposits (Holocene to Pleistocene) - Includes numerous active landslides. Composed of weathered broken up rocks and soil, extremely susceptible to renewed landsliding.

Qs — Saugus Formation (Pleistocene) - Weakly consolidated sandstone, with locally abundant gravelly sand units, susceptible to landsliding.

Qlp — Las Posas Formation (Pleistocene) - Weakly consolidated sandstone and siltstone, with some gravelly sand units, highly susceptible to landsliding.

Qsb — Santa Barbara Formation (Pleistocene) - Claystone, locally contains Monterey Formation shale fragments, highly susceptible to landsliding.

Tp — Undivided Pico Formation (Pliocene) - Composed of claystone, siltstone, and, sandstone, locally pebbly, generally susceptible to landsliding.

Ta — Andesite sill (Yeats, 1964) - Composed of fractured volcanic breccia, andesite, silicified shale, sandstone and breccia.

Tm / Tmb — Modelo Formation (Miocene) - Consists of siliceous and diatomaceous shale and some sandstone and limestone, generally susceptible to landsliding. Tmb= burnt rock of the Modelo Formation.

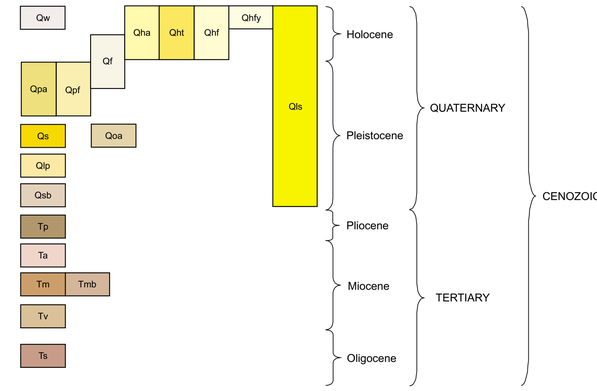
Tv — Vaqueros Sandstone (early Miocene) - Sandstone, locally calcareous.

Ts — Sespe Formation (Oligocene) - Sandstone, locally pebbly, with some siltstone and claystone.

MAP SYMBOLS

- Contact between map units - Generally approximately located or inferred, dotted where concealed.
- Contact between similar map units of different relative age - Recognized by scour and incised channelling features. Generally approximately located.
- Fault - Approximately located or inferred, dotted where concealed, queried where location is uncertain.
- Axis of anticline - Dashed where approximately located, dotted where concealed; arrow indicates direction of plunge.
- Axis of syncline - Solid where accurately located, dotted where concealed.
- 25 — Strike and dip of bedding.
- 25 (U) — Strike and dip of overturned bedding.
- Landslide - Arrows indicate principal direction of movement, queried where existence is questionable (some geologic features are drawn within questionable landslides); hachured where headscarp is mappable. Headscarp includes geologic features where mappable.
- Erosional scarps of incised river terraces along the Santa Clara River.
- Upper boundary of ancient large-scale landslide complex (Irvine, 1995).

CORRELATION OF MAP UNITS



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